



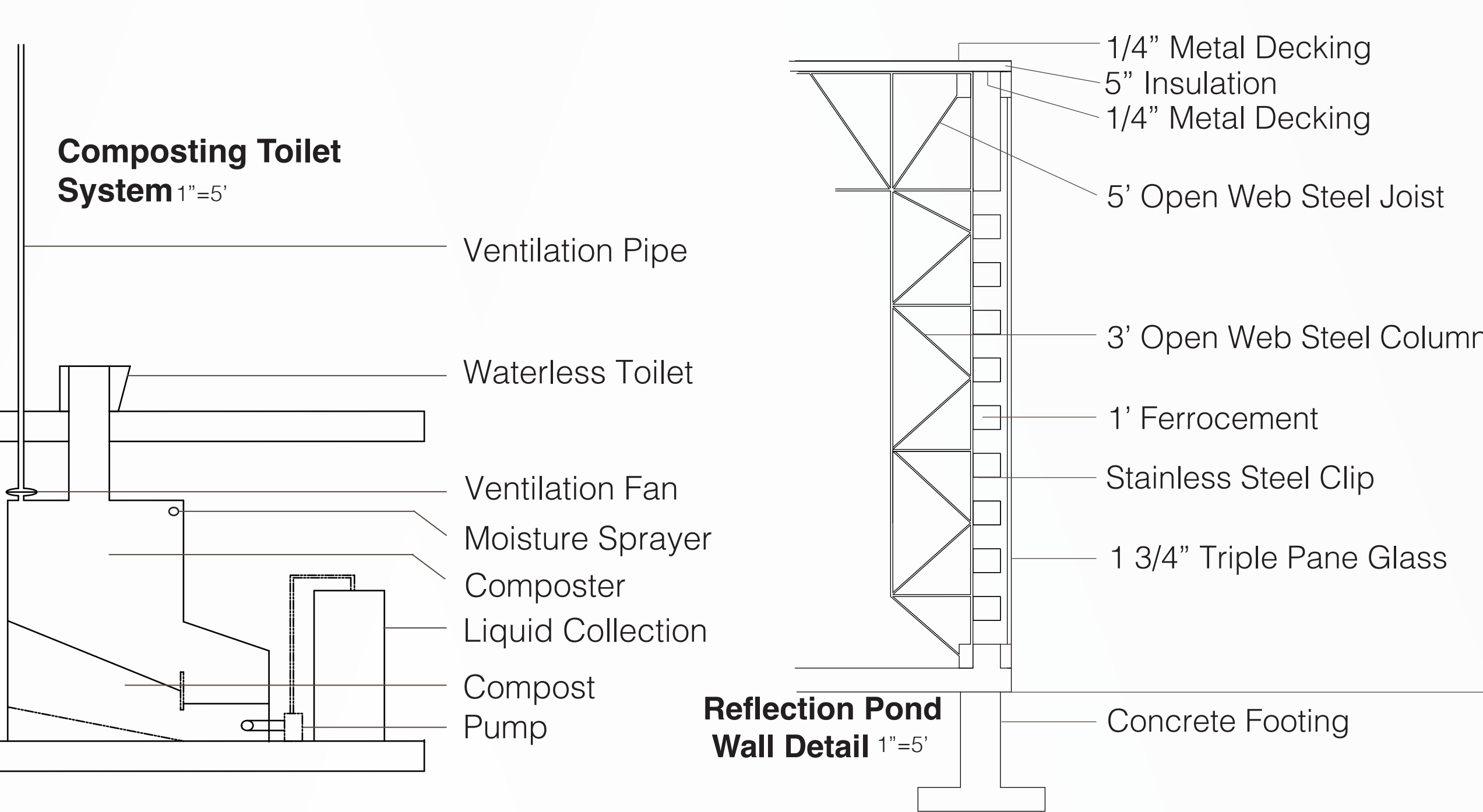


Problem Statement

How can history and cultures of the past influence how we design and treat our sites today?

Theoretical Abstract

Nature and human history are the guiding forces to ensure a prosperous future for many generations. Native Americans have a rich history of living off the land and being in close contact with nature in all aspects of their lives. They thrived for thousands of years with nothing more than what nature could provide. Their techniques and ideas towards nature and site are timeless.



Sustainable Features

Clivus Multrum Composting Toilets

- Uses no fresh water in plumbing system
- End-product compost is usable as fertilizer
- Less disruptive to landscape compared to traditional systems

Greywater recycling and rain collection

- Reduce fresh water use for exterior purposes
- Collect and store rainwater in tanks and reflecting pond
- Urinals and sinks for washing will utilize grey and rain water

Dow PowerHouse Solar roofing panels

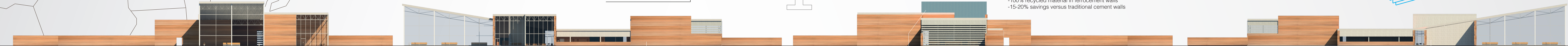
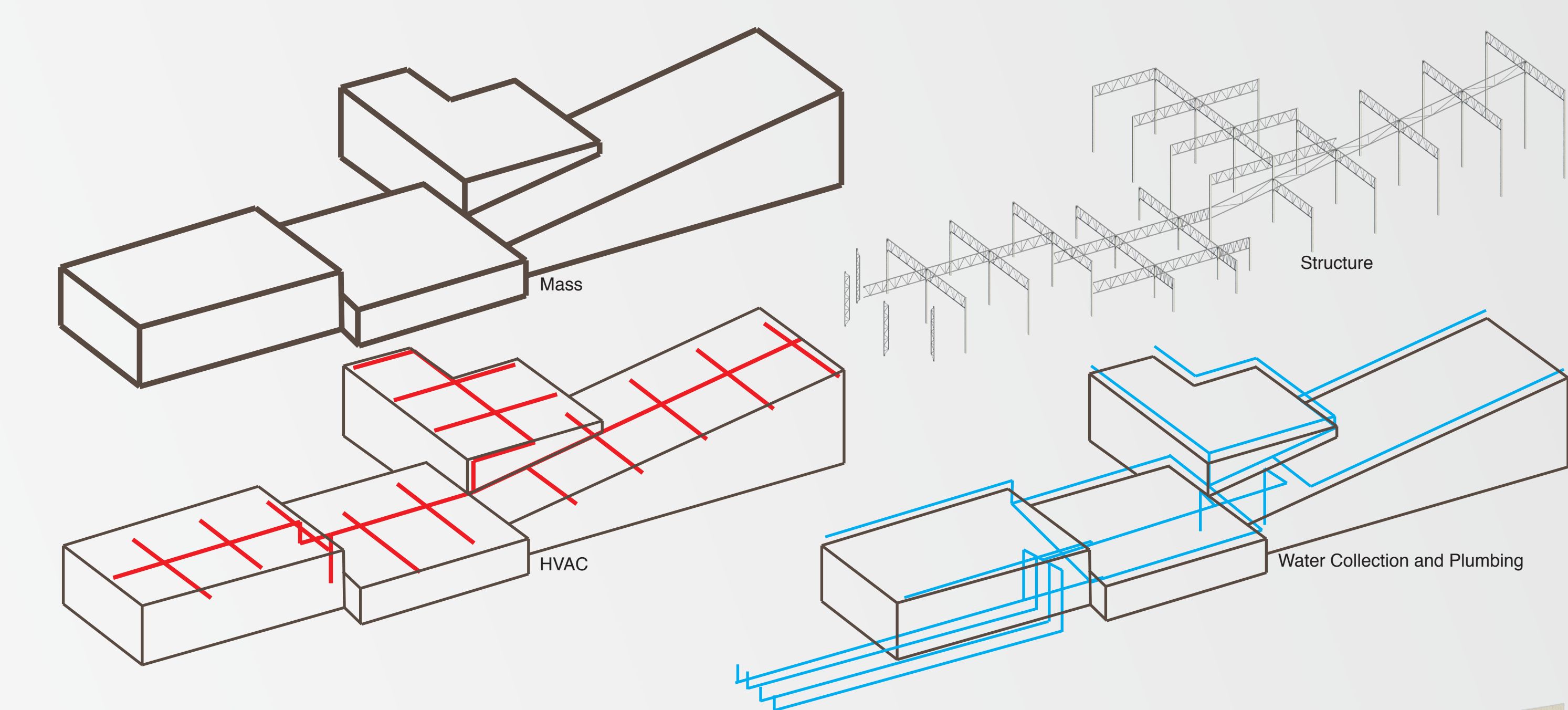
- Anticipated 50.7 million watts of electricity usage per month
- $12\text{w/sf/hr} \times 33,545\text{sf} \times 4.2\text{hrs} \times 30 = 50.7\text{million watts generated}$
- 100% renewable electricity

SIREWALL (stabilized insulated rammed earth) construction

- R-value of R33
- Thermal mass heating and cooling
- Locally sourced material (from basement excavation)

Am-Cor ferrocement construction

- 40-60% smaller carbon footprint
- 100% recycled material in ferrocement walls
- 15-20% savings versus traditional cement walls



Anishinaabe [re-examining the past]



Northwest Exterior Perspective



Reflecting Pond Interior Perspective



Arrival Interior Perspective



South Exterior Perspective



North Display Interior Perspective